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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/849,520	05/20/2004	Kengo Ueki	0073/017001	7136
22893	7590	08/10/2005		EXAMINER
SMITH PATENT OFFICE 1901 PENNSYLVANIA AVENUE N W SUITE 200 WASHINGTON, DC 20006				PATEL, HARSHAD R
			ART UNIT	PAPER NUMBER
			2855	

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/849,520	UEKI ET AL.
Examiner	Art Unit	
Harshad Patel	2855	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### **Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 01 August 2005.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 10-19 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5)  Claim(s) \_\_\_\_\_ is/are allowed.  
6)  Claim(s) 1 and 13-190 is/are rejected.  
7)  Claim(s) \_\_\_\_\_ is/are objected to.  
8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 8/1/05 is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

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**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_.

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 10-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear as to how the width of the case is minimized by using the plurality of light emitting sections disposed along the longitudinal direction of the pipe.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Conduit (EP0099712) in view of Horikawa (JP 2002-267509).

Conduit teaches a flow sensor comprising a detection section (10) having a display section (44') and a main section (RD) provided as a separate body for displaying the flow quantity detected by the detection section. Conduit does not teach the use of light emission section. Horikawa teaches the use of light emission section (106) to indicate the flow direction. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use light emission devices for the display since such are mere alternatives for displaying the data.

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5. Claims 11, 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Conduit in view of Horikawa and further in view of Koike (08-271300).

Conduit in view of Horikawa shows all the features of the instant invention except for the Karman vortex detection section for ultrasonically detecting the changes in a Karman vortex of the fluid. Koike teaches a Karman vortex device ultrasonically detecting the vortices generated in the fluid by an interrupter. It would have been within the scope of an individual to use the detecting device of Koike for the device of Conduit since such flow measuring devices are mere alternatives and are widely used for measuring flow rates of a flowing medium in a pipeline. As to providing the detection section of a specific dimension or providing a hermitically sealed casing, it would be obvious to a person having ordinary skill in the art to make a device that is small such that it could be mounted in a difficult mounting locations and also providing a hermitically sealed casing would prevent fluid leakage from within the device or dust entering from the outside.

*Allowable Subject Matter*

6. Claims 12 and 16-19 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

*Allowable Subject Matter*

7. The following is a statement of reasons for the indication of allowable subject matter: The prior arts made available do not teach or fairly suggest, alone or in combination, the sensor head comprising a press member for pressing the ultrasonic device against the pipe line or the sensor head section comprising an alarm detector for detecting at least one of whether the fluid is filled in the pipe line or there is a bubble in the fluid and output an alarm signal.

***Response to Arguments***

8. Applicant's arguments filed 8/1/05 have been fully considered but they are not persuasive. The arguments that the prior art of record do not teach the two limitations as currently claimed is not persuasive. The limitations that the case having a width perpendicular to the longitudinal direction and the pipe line having a width perpendicular to the longitudinal direction of the pipe line being approximately equal is not persuasive. The term 'width' is a relative term and it is known that a case would have a specific width in which when a pipe line is introduced that may also have a width, then the width of the case could be approximately the same width of the pipe line if no additional components are attached to the pipe line that would require the casing to have a larger width. It would be within the ordinary skilled individual to decide as to what width of the casing and pipe to use.

As to the arguments that the prior arts of record do not teach the width of the case can be minimized by using plurality of light emitting section disposed along the longitudinal direction is not persuasive. Again the width is a relative term and does not distinguish over the cited references. The width can be such that the light emitting devices can be easily located on it as long as there is nothing else positioned on the same width or the LEDs are positioned in a single line in a longitudinal direction. To modify the width would not require a special engineering skill, it would be within the scope of a skilled individual.

***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harshad Patel whose telephone number is (571) 272-2187. The examiner can normally be reached on Monday-Thursday (6:30 AM-5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on (571) 272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Harshad Patel  
Primary Examiner  
Art Unit 2855